incorporating fibers from the respective conveying channels into the bundling point at different times by varying processing features between the respective conveying channels.

16. The method as in claim 15, wherein any combination of the following processing features are varied between the conveying channels: duration of fiber conveying with the channels; impingement angle of the fibers with respect to an axial line of the yarn channel; speed of fiber conveying within the channels; acceleration of fibers conveyed in the channels; and position of the fibers within the channels at the end of the conveying path.

17. The method as in claim 15, wherein different types of fibers are conveyed through the respective conveying channels.

18. The method as in claim 17, wherein different combinations of long staple fibers, short staple fibers, natural fibers, artificial fibers, and synthetic endless fibers are conveyed through the conveying channels.

19. The method as in claim 15, wherein one of said conveying channels defines a shorter conveying length as compared to a longer conveying length of the other respective conveying channel, said method further comprising feeding in at least two different fiber bundles having different fiber lengths at the fiber delivery point and conveying shorter fibers from one bundle in the channel having a shorter conveying length, and conveying longer fibers from the other bundle in the channel having a longer conveying length.

20. The method as in claim 19, further comprising directing the fibers in the shorter conveying length channel to the bundling point at a smaller impingement angle as compared to the fibers from the longer conveying length channel.

21. The method as in claim 19, wherein artificial fibers having a shorter fiber length are conveyed as core yarn fibers in the shorter conveying length channel, and natural fibers having a longer fiber length are conveyed in the longer conveying length channel.

22. An apparatus for spinning fibers into a yarn by subjecting the fibers conveyed from a fiber bundle at a delivery point to a rotating air stream at a fiber bundling point at the channel mouth of a spindle, said apparatus comprising:

at least two different fiber conveying channels disposed between said delivery point and said bundling point;

said conveying channels being differently configured so as to differently process fibers conveyed therethrough such that fibers from said respective conveying channels are incorporated into said bundling point at different times.

23. The apparatus as in claim 22, wherein said conveying channels are configured so as to have any combination of different fiber conveying lengths due to different shapes, different impingement angles with respect to an axis of said spindle channel; different directions of outlet mouths, different cross-sectional shapes; different fiber speed profiles; and different fiber acceleration profiles.

24. The apparatus as in claim 22, wherein at least one of said conveying channels has a reduced cross-section at an end thereof adjacent said bundling point as

compared to said other conveying channel such that fibers conveyed therethrough are speeded up and stretched.

25. The apparatus as in claim 22, wherein at least one of said conveying channels has a widened cross-section at an end thereof adjacent said bundling point as compared to said other conveying channel such that fibers conveyed therethrough are slowed down and tend to adopt a transverse position in said conveying channel.

26. The apparatus as in claim 22, wherein one of said conveying channels defines a shorter conveying length as is positioned so as to convey shorter length fibers for use as core fibers in the spun yarn.

27. The apparatus as in claim 26, wherein said other conveying channel defines a longer conveying path as is positioned so as to convey longer length fibers for use as cover fibers in the spun yarn.

28. The apparatus as in claim 22, wherein one of said conveying channels defines a shorter conveying length as is positioned with a smaller impingement angle with respect to an axis of said spindle channel so as to convey shorter length fibers for use as core fibers in the spun yarn, and said other conveying channel defines a longer conveying path as is positioned with a greater impingement angle so as to convey longer length fibers for use as cover fibers in the spun yarn.

29. An apparatus for spinning fibers into a yarn by subjecting the fibers conveyed from a fiber bundle at a delivery point to a rotating air stream at a fiber bundling point at the channel mouth of a spindle, said apparatus comprising:

a fiber conveying channel disposed between said delivery point and said bundling point;

a driven tension roller disposed generally adjacent said delivery point, said tension roller having a longitudinal segment with a reduced diameter adjacent a longitudinal segment with an increased diameter, and

said increased diameter segment disposed in contact with a portion of said fiber conveying channel so as to define a fiber clamping ling therewith, and said reduced diameter portion spaced from an adjacent portion of said fiber conveying channel so that fibers pass unclamped between said reduced diameter portion and said fiber conveying channel.

30. The apparatus as in claim 29, wherein said tension roller is driven at a circumferential speed such that said increased diameter segment is driven at a circumferential speed corresponding to fiber delivery speed into said fiber conveying channel.--

REMARKS

The present amendment will greatly facilitate prosecution of the application. The new claims more distinctly set forth and claim the invention. The Examiner is encouraged to contact the undersigned to resolve any issues regarding this matter.

Respectfully submitted,

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